

REMARKS

Claims 1, 3-6, 8, 10, 11, 13, 14, 16, 17, 19, 23, 26-28, 30-34, and 36-37 have been amended to further define the invention, and claims 2, 7, 25, and 29 have been canceled without prejudice or disclaimer. Accordingly, claims 1, 3-6, 8-24, 26-28, and 30-38 are pending.

Applicants respectfully assert that support for claims 1, 3-6, 8, 10, 11, 13, 14, 16, 17, 19, 23, 26-28, 30-34, and 36-37 may be found, for example, in FIGs. 1-31, as well as the corresponding disclosure of the Specification. Accordingly, Applicants respectfully assert that amended claims on pages 2-13 do not introduce new matter.

Claim Rejections Under 35 U.S.C. §§102(e) and 103(a)

On pages 2 to 14 of the Office Action, claims 1, 2, 4, 7-11, and 13-23, 25, 27, and 29-38 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Achuthan et al. (US 6,756,643), and claims 3, 5, 6, 12, 24, 26, and 28 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Achuthan et al. in view of various combinations of Fried et al. (US 6,642,090), Aller et al. (US 6,909,147) and Park et al. (US 2005/0145932). Applicants respectfully traverse these rejections for at least the following reasons.

Independent claim 1, as amended, recites a semiconductor device including, in part, a first semiconductor region having a plurality of field effect transistors having "a plurality of

semiconductor layers protruding upward from a substrate and aligned such that the channel current direction is mutually parallel," and a second semiconductor region having "semiconductor layers protruding upward from the substrate and placed, opposing the first semiconductor region at both ends in the direction perpendicular to a channel current direction and between the semiconductor layers in the first semiconductor region," (emphasis added).

Similarly, independent claim 19, as amended, recites a process for manufacturing a semiconductor device including, in part, "forming fin-type semiconductor layers for forming a first semiconductor region comprising a plurality of semiconductor layers protruding upward from a substrate such that direction of channel current flowing in the individual semiconductor layers is mutually parallel," and "a second semiconductor region comprising semiconductor layers protruding upward from the substrate in both sides sandwiching the first semiconductor region and between the semiconductor layers in the first semiconductor region," (emphasis added).

In direct contrast to Applicants' claimed invention, Achuthan et al. discloses, in FIG. 8, only one semiconductor layer 810 corresponding to a semiconductor layer in the first semiconductor region. Similarly, in FIG. 9 of Achuthan et al., lines 902 are purposely disposed at lateral end regions of the

line 901. Likewise, in FIG. 10 of Achuthan et al., dummy structure 1002 laterally surrounds the line 1001.

Applicants respectfully assert that Achuthan et al. fails to teach or suggest a second semiconductor region having "semiconductor layers protruding upward from the substrate and placed, opposing the first semiconductor region at both ends in the direction perpendicular to a channel current direction and between the semiconductor layers in the first semiconductor region," as required by amended independent claim 1. Similarly, Achuthan et al. fails to teach or suggest "a second semiconductor region comprising semiconductor layers protruding upward from the substrate in both sides sandwiching the first semiconductor region and between the semiconductor layers in the first semiconductor region," as required by amended independent claim 19.

In addition, Applicants respectfully assert that none of Fried et al., Aller et al., and Park et al., whether taken singly or combined, can remedy the deficiencies of Achuthan et al., as detailed above. Specifically, Applicants respectfully assert that each of Fried et al., Aller et al., and Park et al. is completely silent with regard to using common semiconductor layers in both first and second regions. Thus, Applicants respectfully assert that the combined teachings of Achuthan et al., Fried et al., Aller et al., and Park et al. fail to establish a *prima facie* case of obviousness with regard to

amended independent claims 1 and 19, and hence dependent claims 3-6, 8-18, 20-24, 26-28, and 30-38.

For at least the reasons set forth above, Applicants respectfully request that the rejections of claims 1-38 under 35 U.S.C. §§102(e) and 103(a) be withdrawn.

This Response is believed to be fully responsive and to place the application in condition for allowance. Entry of the amendment, and an early and favorable action on the merits is earnestly requested. Applicants respectfully request that a timely Notice of Allowance be issued in this application.

Should the Examiner believe that any matters need to be resolved in the present application, the Examiner is respectfully requested to contact Applicants' undersigned representative at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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